

25 and 35 years with breast cancer diagnosed either during pregnancy or immediately after delivery. Five had stage III disease, three stage II and the rest stage I. Data from estrogen and progesterone receptor assays were available for 11 of the 13: for 2 of them the results were strongly positive for both receptors; for the other 9 the results were negative for both receptors.

In a maximum follow-up period of 28 months there have been two deaths, at 22 and 26 months respectively after diagnosis; three patients have recurrent disease that is under treatment, and the other eight have either completed a year of adjuvant chemotherapy or are still receiving such treatment.

Among the seven patients with a recurrence are three whose disease recurred in the opposite breast; in one of the three the second tumour was negative for both types of hormone receptor, though the original tumour had been strongly positive for both.

These cases raise certain questions regarding breast cancer that are of concern to me:

- Why have I seen so many cases in the last 2 years in southern Alberta?

- What is the place of adjuvant chemotherapy in this situation, especially in view of the presence of a fetus?

I treated three of the women with melphalan and 5-fluorouracil, giving one course late in the second trimester. The infants were delivered early in the third trimester, and none showed evidence of toxic effects.

- Why have three of the seven recurrences been in the opposite breast, or in these cases is the disease better classified as bilateral breast cancer?

- Is breast cancer increasing in incidence in women under 35 years of age? If so, why?

- Most of the women found the tumour themselves. The delay in diagnosis ranged from a few weeks to over a year in the most recent patient.

It would be interesting to know if other physicians have encountered a similar situation and if their experience with these difficult medical problems has been similar to mine.

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## Cyanoacrylates in medicine

*To the editor:* In their letter on rapid-setting adhesive cyanoacrylates (*Can Med Assoc J* 1982; 126: 227, 228) Drs. Blais and Campbell draw attention to

properties of and adverse tissue reactions to these adhesives, which are sometimes used in medicine. They point out that methyl methacrylate is sometimes added to cyanoacrylate preparations to improve handling characteristics and mechanical properties. The complications caused by methyl methacrylate warrant comment.

Methyl methacrylate has been used extensively in orthopedic surgery. Its immediate effects on the patient under anesthesia include hypotension<sup>1,4</sup> and arterial hypoxemia,<sup>3,4</sup> and it has been implicated in cardiac arrest.<sup>5,6</sup> It may also cause delayed hypoxemia — that occurring a few hours postoperatively.<sup>7</sup> In view of the potential hazards of this compound, close monitoring of the patient's vital signs and hydration status is essential when an adhesive to which it has been added is applied.

As Blais and Campbell rightly warn, "the medical use of common industrial and consumer grades of adhesives of largely unknown composition...seems both unwise and unnecessary".

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## References

1. KIM KC, KIM CY: Possible cause of hypotension due to total hip replacement and choice of vasopressor. In abstracts of scientific papers presented at annual meeting of American Society of Anesthesiologists, 1972: 277-278
2. KIM KC, RITTER MA: Hypotension associated with methyl methacrylate in total hip arthroplasties. *Clin Orthop* 1972; 88: 154-160
3. TURNBULL KW, BEREZOWSKY JL, POULSEN JB: General anaesthesia and total hip replacement. *Can Anaesth Soc J* 1974; 21: 546-556
4. MODIG J, BUSCH C, OLERUD S, SALDEEN T, WAERNBAUM G: Arterial hypotension and hypoxaemia during total hip replacement: the importance of thromboplastic products, fat embolism and acrylic monomers. *Acta Anaesthesiol Scand* 1975; 19: 28-43
5. FROST PM: Cardiac arrest and bone cement (C). *Br Med J* 1970; 3: 524
6. POWELL JN, MCGRATH PJ, LAHIRI SK, HILL P: Cardiac arrest associated with bone cement. *Ibid*: 326
7. SERITT S: Fat embolism in patients with fractured hips. *Br Med J* 1972; 2: 257-262

## Sex education: the physician's role

*To the editor:* In a letter to the editor (*Can Med Assoc J* 1982; 126: 1026, 1031) Dr. Andrew Murray quotes an article by Dr. Carol Nadelson to support his point that "there is evidence...that sex education in schools does not help reduce the incidence of teenage pregnancy". I reviewed this particular article and feel that Murray has taken liberty in quoting Nadelson to support his position. In fact, Nadelson's comments support the view of Dr. T. Johnstone, who, in a letter to the editor (1981; 125: 958), stated: "It appears that successful programs need both an educational compo-

nent and a clinic to provide contraception and individual counselling."

Nadelson's paper also states, in contrast to Murray's position, that "ambivalence towards pregnancy and denial of the possibility that it could occur and inability to take responsibility for contraception point to the need for more comprehensive educational and counselling programs that take psychosocial and developmental factors into account". Nadelson found that only 5% of adolescents cited schools as the primary source of sexual information, compared with 46% who cited friends and 28% who reported parents and relatives as the primary source. Nadelson also indicated that "adolescents who report having had sex information courses at school scored significantly higher on the factual section of the questionnaire". However, Nadelson cautions, this group included girls at a maternity home and mothers' clinic, who were involved in sex education courses. There was considerable variation in what was perceived as a sex education course — "from high school biology with extensive sex information to a mere mention of sexuality in a health course".

A consensus should be sought on appropriate training for physicians dealing with sexual health, a definition of "sex education" and a basic curriculum.

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## Smoking and physicians

*To the editor:* The article by Drs. Paula J. Stewart and Walter W. Rosser (*Can Med Assoc J* 1982; 126: 1051-1054) concludes that informal advice to promote nonsmoking is ineffective. There are, however, other means available to physicians as individuals or as a group that may be more efficacious.

Physicians who smoke should try to stop. A survey sponsored by the American Cancer Society showed that non-smoking physicians promoted nonsmoking more aggressively than smoking physicians.<sup>1</sup> This obvious conclusion should increase the present trend for physicians to represent a disproportionately small percentage of smokers.<sup>1</sup>

Taxes on cigarettes should be increased. Richard Ebert has described the decrease in gin consumption after heavy taxes were introduced in the 18th century.<sup>2</sup> Medical associations should push for increased taxes to be levied on cigarettes, with the income to be used for cancer research.

Medical associations should also call for a ban on all cigarette advertising.